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ABSTRACT

A study described the influence of writing conferences on revision knowledge and revision activity for an initially knowledgeable first-grade reviser and a relatively naive one. Subjects, two first-grade students in a whole language classroom, were chosen from the 16 students in the class for close study. Data analysis consisted of reading all of the writing and transcripts of interviews and conferences; determining the quality of first and last draft of each composition; coding conference talk; tracing comments between conferences, interviews, and revisions carried out; calculating counts of revisions the children talked about in interviews and revisions they carried out; and reviewing the teacher's observations about the two children's behavior in the classroom. Results indicated: (1) that conference influence was variable, both within and across children; and (2) dramatic differences were noted between the two children in conference influence, with only the initially naive writer profiting significantly from conferences and evidencing clear developmental progress in revision. (Four tables of data are included; 38 references are attached.) (RS)

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Variation in Writing Conference Influence on Revision: Two Cases

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Abstract

The purpose of the study was to describe the influence of conferences on revision knowledge and revision activity for an initially knowledgeable first-grade reviser and a relatively naive one. Using both quantitative and descriptive analyses, data from three baseline points and seven conference points were summarized. At conference information collection points, the children wrote, groups conferenced, children were interviewed about potential revisions, and students revised. At baseline points, there were no conferences. For analyses, we: (a) read all of the writing and transcripts of interviews and conferences; (b) determined quality of first and last draft of each composition; (c) coded conference talk: (d) traced comments between conferences, interviews, and revisions carried out; (e) calculated counts of revisions the children talked about in interviews and revisions they carried out; and (f) reviewed the teacher's observations about the two children's behavior in the classroom. Conference influence was variable, both within and across children. Further, dramatic differences were noted between the two children in conference influence, with only the initially naive writer profiting significantly from conferences and evidencing clear developmental progress in revision.

Variation in Writing Conference Influence on Revision: Two Cases

The purpose of this study was to describe the influence of conferences on revision knowledge and revision activity for an initially knowledgeable first-grade reviser and for a relatively naive one. The present study was a follow-up to prior research (XXXXXXX, 1990) in which we examined the influence of conferences on 16 first-graders' revision. Earlier, we concluded that conferences did influence revision for many children, but that the influence was mediated by entry-level revision knowledge and activity and writing level. For the present study, we tried to further describe *how* conference influence differed for different kinds of writers by looking *in-depth* at the revision development of 2 of the 16 children who participated in the earlier study--one whose initial revision knowledge and activity were relatively low and one whose were relatively high.

Revision was defined as making changes at any point of writing (before, during, and/or after pen meets paper). It involves (a) detecting mismatches between intended and instantiated text, (b) deciding how changes could or should be made, and (c) actually making changes (cf. Beach, 1984; Fitzgerald & Markham, 1987, in press; Flower & Hayes, 1981). The first two aspects of revision (detecting mismatches and deciding how to make changes) are knowledge components of revision, distinguished from the third aspect (making changes) which is actual revision activity.

Revision is usually thought of as an important feature of writing because it may, in some instances, improve the quality of compositions (cf. Bracewell, Scardamalia, & Bereiter, 1978; Bridwell, 1980). Revision can also lead to new insights; writers often contend that they learn what they are trying to say as

they write and revise (Odell, 1980), and revision sometimes helps writers to find and understand new meanings.

Although the importance of revision is widely recognized, many writers, especially young writers, do not revise much, making mainly surface revisions when they do (Bridwell, 1980; Graves & Murray, 1980; National Assessment of Educational Progress & Educational Testing Service, 1986). Further, American schools place little emphasis on revision (Applebee, 1981; Hoetker & Brossell, 1979; Pipman, 1984).

Writing conferences represent one promising means of stimulating revision activity, even for beginning writers. Several recent reports suggest that writing conferences affect developing writers' ability to reflect on their work, its content, and the writing process (Calkins, 1986; Freedman & Calfee, 1984; Walker & Elias, 1987). Specifically, revision in writing may be enhanced through conferences because comments made and questions raised during conference discussions may help writers instantiate knowledge about readers' expectations for what makes good texts, identify problem spots, and know how to fix problems.

However, some limited evidence suggests conference influence is variable. Studies have shown that individual conferences with college students and group conferences with children from as early as first grade to as late as twelfth grade vary in effectiveness both among individuals and across occasions for individual students (Fitzgerald & Stamm, 1990; Gere & Stevens, 1985; Vukelich, 1986; Walker & Elias, 1987). For example, Vukelich found that only one-fourth of the 24 second graders in her study incorporated peers' comments into their texts more than half of the time; fully one-fourth never used their peers' comments.

But little is known about conditions related to conference effectiveness. In the present study, we explored in-depth one possible condition--writer's entry-level revision knowledge and activity.

Our Classroom and the Conferences

Our classroom was one in which the teacher (one of the co-authors of this paper) adhered to the principles of a "whole language" approach to language arts education as outlined by Gunderson and Shapiro (1988). Briefly, reading, writing, listening, and speaking were integrated as much as possible; language development was facilitated through a focus on the processes of communication, rather than the products, and through a focus on the main purpose of communication as meaning-making; trade books and a language experience approach were used rather than basal readers (though unlike some whole language implementations, students were sometimes homogeneously grouped for reading lessons); invented spellings were encouraged; practice in reading and writing was plentiful; and student ownership of reading and writing was encouraged. Children learned about various aspects of composing by being authors themselves. They learned about: planning techniques, such as mapping; working with audiences in pairs, with friends, and in groups; and "publishing" through displays in their classroom and school as well as a class newsletter that was routinely sent home to parents.

In January, 16 children who engaged in writing at least to a minimal degree (as judged by the classroom teacher) in a class of 28 first graders were chosen to participate in two interactive conference groups. The groups met every other week through the end of the school year. Selection of students and initiation of conferences had been routinely practiced in January in past years by this classroom teacher.

In the interactive group conferences (cf. Gere & Stevens, 1985), the teacher met with students in small groups to discuss the children's written pieces. During each conference, students took turns sitting in the "author's chair" and reading their pieces aloud. For each author's piece, the teacher guided the discussion by asking three central questions: What was the piece about? What did you like about it? and What comments or suggestions do you have for the author? The teacher also contributed her opinions along with the children.

Methodology

Data Collection Framework

We collected information at ten time points, approximately every other week. The first three times were before conferencing started, so these supplied "baseline" information which could be compared to the information collected at the other seven points, after conferencing started.

At each conference information collection point, the following series of events occurred: (a) Children wrote on topics of their choice (using blue pens). (b) One or two days later, groups met to discuss at least four of the papers. (c) One or two days later, the children were interviewed individually about changes they might want to make in their papers. The interviews were done to obtain information about the children's knowledge of revision (i.e., ability to identify mismatches between intentions and actual text, and knowledge about how to fix problems). The interviewer asked: Are there any changes you want to make? Why do you want to make this change? How would you make it? The interviewer did not prompt or provide feedback in any way. (d) Finally, the next day, the children got their papers back to make desired changes on those papers (using black pens), and also then got clean pieces of paper to make new drafts (using black pens).

At baseline points, the same events occurred except there were no conferences.

How We Chose Allison and Paul

We wanted to choose two children, one who knew quite a bit about revision and revised a fair amount, and one who knew relatively little about revision and did not revise much. Baseline data collected on all 16 children (used in our previous study) helped us to select the two children for close study. In the previous study, we had created some variables to represent knowledge of revision and actual revision activity. For knowledge of revision (i.e., the ability [a] to identify mismatches between intentions and actual text and [b] to know how to fix problems), two variables were created from information collected during interviews: number of spots (places in the text) (per 100 [revision stage 1] words) identified for possible change (from interviews) and average specificity for how to make desired changes (from interviews) (possible range, 0 [vague] to 2 [very specific]). (To check on reliability of the scoring, two people scored independently, and they agreed 87% and 96% of the time, respectively.)

To assess actual revision activity in the children's writing, number of revisions made per 100 words was determined for each of four revision stages (Bridwell, 1980): stage 1 (Day 1), in-process revisions on the first day of writing (blue changes on blue ink); stage 2 (Day 2), new revisions marked on the first day's draft (black changes on blue ink); stage 3 (Day 2), revisions made between the revised marked first day's draft and another draft on a new paper, but before in-process revisions; and stage 4 (Day 2), in-process revisions on the last draft (black changes on black ink). Revisions were determined using Faigley's and Witte's (1981, 1984) system. (When two people scored separately, they agreed 81% to 95% of the time.)

Then, to choose the two children for the present study, for each of the three baseline information collection points, and for each of the two knowledge of revision variables and for each of the four stages of revision activity variables, we rank ordered the 16 students. After looking at all of these rankings, no child was lowest on all variables or highest on all variables. In fact, surprisingly, all of the children showed at least some knowledge about revision. For knowledge of revision, they differed only in the degree to which their scores were consistently high across the three baseline points.

Allison was selected as the clearest illustration of students ranked relatively low on the variables, and Paul was selected as the clearest illustration of relatively high rankings. The most striking difference between the two students on the variables used for rankings was: Paul made more stage-3 revisions than Allison. Allison made about 6 revisions per 100 words for each of the three baseline pieces, whereas Paul made from about 20 to 29 per 100 words across the three baseline pieces. As an example of differences in revisions, compare the stage-3 revisions for each student's baseline-2 composition in Table 1. The changes from the preceding versions are highlighted in italics.

Insert Table 1 about here.

The predominance of surface (rather than meaning) changes shown in the baseline-2 compositions in Table 4 was characteristic of all three baseline pieces for both children. However, we might note another difference between the revisions of the two children. As the baseline-2 pieces in Table 4 show, it appeared that many of Paul's changes in spelling and punctuation tended to be "correct" (in relation to standard usage) changes, whereas Allison's

spelling changes did not. Also, many of Paul's changes were aimed towards fixing punctuation, whereas few of Allison's were.

It might also be noted that, although meaning changes were not abundant at any stage of revision during the baseline period for either child, Paul was more inclined towards making meaningful revisions than was Allison. We coded eight such changes over the entire baseline period for Paul and two for Allison.

Also, during baseline data collection, there was weak evidence that Paul was slightly more consistently *specific* than Allison in suggesting how he would make desired changes. At all three baseline points, Paul was always very specific about how he would make desired changes on his next draft (averaging a score of 2--"very specific"--across the three baseline points). For example, when the interviewer asked Paul about changes he might want to make in his baseline-3 piece, he said, "Well, I'd turn 'they' into 'Transformers.' I think that's all." This kind of clarity about how to make the changes he wanted was evident for each of the four places for revisions he discussed during baseline interviews.

Allison, on the other hand, during baseline interviews, was not very specific about how she would make all changes (averaging 1.4--"specific"--across the three baseline points). For three of the five suggested changes discussed during baseline interviews, she was as specific as is shown in the following example. At baseline point 3, for a piece about Allison's mother's new car, in response to the question, "Are there any changes that you can think of making in your story?" Allison talked about her sister spilling hot chocolate in the car. Then the following discussion ensued:

Allison: I want to add that.

Interviewer: You want to add that. Where do you want to add it? What do you want to do?

Allison: Well, if I was going to add it, I would add it on the end.

Interviewer: O.K. So what would you do then?

Allison: I'd put that my sister spilled hot chocolate in the car and she alredy got burned by coffee. If the hot chocolate had been any hotter she could have got another burn on her.

But for two suggested changes, she was more vague about how she would manage the fix-ups. For example, for her baseline-1 piece about getting a new computer, the following discussion took place:

Allison: I might want to add that I can . . . upside down . . . on the wrong side, and we had to pull it out.

Interviewer: You might want to add that you put the disk in

Allison: on the wrong side.

Interviewer: On the wrong side . . . Well where would you put it if your were going to add it?

Allison: I would put it there in front of this.

Interviewer: In front of "I am going to get another computer."

Allison: I don't know. I want to put it at the end.

Interviewer: You want to put it at the end? . . . O.K. Is that all?

(Incidentally, Allison and Paul were in different conference groups.)

Other Characteristics of Allison and Paul

Allison and Paul were similar at the onset of the study in that both attended kindergarten and participated in a common curriculum. Both were children of middle-class two-parent families.

They were also different from one another in some significant ways. In January, the teacher ranked Allison 14th among her 28 children on writing ability, and ranked Paul 1st. Differences in their writing ability were also born out by quality scores assessed by using an analytic scoring system (modified from Diederich, 1974), which could potentially range from 6 to 48. (Agreement for scoring was 78%.) Allison's quality scores for last drafts over the baseline period were 25, 22, and 24 (averaging 23.77); Paul's were 39, 33, and 24 (averaging 32.00).

Allison scored in the 63rd percentile on Total Reading on the year-end California Achievement Test (CTB/McGraw Hill, 1985); Paul scored in the 98th percentile. Allison was in the third of five reading groups in April; Paul was in the first.

Also, throughout his first-grade year, Paul attended the school's gifted and talented classes; Allison did not.

At the end of the study, the classroom teacher described Allison as a "social butterfly," and as a person who was eager to please the teacher, always putting forth her best effort. Generally speaking, she enjoyed group activities and took an active part in group settings. In retrospect, the teacher thought Allison liked participating in the interactive writing conferences and generally looked forward to them.

The teacher characterized Paul, on the other hand, as a gifted, creative individual who enjoyed being and working by himself. Though Paul enjoyed playing with others in active or imaginary games, generally, he shied away from group academic activities, preferring solitude. He often sought out a quiet corner of the room to write, making books or games. The teacher thought he disliked the interactive writing conferences since he was often silly and "off-task" during them.

Analyses

To study Allison and Paul we did the following: (a) We read all of their writing, transcripts of their interviews, and transcripts of their conferences, using procedures similar to those outlined by Patton (1980). This helped us to see patterns in, and gain impressions of, their development. with specific examples to support the impressions. (b) We determined quality of the children's first and last drafts at each conference time point (cf. method of assessment described in preceding section, used at baseline points). (c) To help assess the degree to which their revisions or interview talk about revisions was linked to conference discussion, we traced the two students' comments between conferences, interviews, and revisions made on paper. Four percentages were calculated for each conference: the percent of group conference suggestions regarding revision which students voluntarily proposed for possible changes during interviews; the percent of group conference suggestions regarding revision which actually resulted in revisions; the percent of proposed changes given in interviews which could be traced back to group conference discussion; and the percent of actual revisions which could be traced back to conferences. (Agreements for determining the four percentages ranged from 78% to 100%.) (d) For each time point, we calculated counts of the number of potential revisions the two children identified in their interviews (per 100 words) and of the number of revisions made for each piece at each of the four stages (per 100 words). (e) We coded the talk that went on in each conference. We separated the conference talk which had been tape recorded and transcribed into statements and coded each statement using the categories shown in Table 2. (Statements were determined using a specific set of rules devised by one of the researchers. They roughly corresponded to simple and complex sentences [cf., propositions in Mandler & Johnson, 1977;

Whaley, 1981]). We devised our own categories using similar previously devised systems as a guide (cf. Gere & Stevens, 1985; Walker & Elias, 1987). (Agreement between two coders for determining statements was 97%; for coding statements, agreements ranged from 71% to 99% across categories.) Percents of statements in each category were then calculated. (f) The classroom teacher supplied additional information about Allison's and Paul's behavior in the classroom in general.

Insert Table 2 about here.

Results

Overview

Each of the following sections explicates diverging patterns in the two children's development of revision knowledge and revision activity: On the whole, Allison's revision knowledge and activity were highly influenced by conferences and a clear developmental pattern emerged which can be described as three overlapping periods, whereas (compared to Allison) Paul's revision knowledge and activity were perhaps minimally influenced by conferences and no developmental pattern was evident.

Within each section, findings pertaining to Allison are presented first.

Background

To provide a context for interpreting the development of the children's revision knowledge and activity, we first present our analysis of the conference discussions, then give assessments of the quality of their compositions, and finally present general impressions of their writing.

Conference discussion. There were some similarities and some differences between Allison's and Paul's conference conversations. Table 3 shows that with regard to teacher talk, for both children: (a) most conference talk was

done by the teacher; (b) across all conferences, the main functional emphasis of teacher talk clearly was elaboration, generally followed distantly by informing and eliciting; (c) a great many of the teacher's statements (typically one-third to one-half) either directly or indirectly helped writers to instantiate declarative knowledge about readers' expectations for text; and (d) many of the teacher's statements were directed towards development of revision knowledge, a feature that was especially pronounced in Allison's fifth and sixth conferences.

Insert Table 3 about here.

Student talk in Allison's and Paul's conferences (see Table 4) was similar only in that the main function of student statements was to inform; next most, students elaborated; sometimes they elicited information.

Insert Table 4 about here.

Teacher talk in the two children's conferences (see Table 3) was different in the following ways: (a) For Paul, across all conferences, the teacher mainly talked about content of the pieces, with procedures and form following. However, content wasn't always the main topic in Allison's conferences. Instead, teacher talk about form, form-content, and/or procedures sometimes prevailed. In fact, perusal of the conference transcripts showed that readers' expectations for organization was a salient feature of Allison's conferences, with the teacher frequently calling attention to the order of events in Allison's pieces. (b) For Paul, when revisions were discussed, they always entailed meaning change and mainly appeared to require additions. Though Allison's conferences also tended to follow this pattern, in conference five, surface rearrangement was treated at great length.

Student talk in the two children's conferences (see Table 4) was different in these ways: (a) The main focus of student talk in Paul's conferences was overwhelmingly on content. Students discussed procedures somewhat, but only occasionally did they talk about form. Though the same pattern fit Allison's initial and later conferences, her middle conferences were strikingly different. They were characterized by a high amount of student discussion about form, form-content, and/or procedures. (b) For Paul, students talked a little about revision knowledge and how to make revisions. However, in two of Allison's conferences, students talked about revision knowledge a great deal. (c) Students also made many statements in Allison's middle two conferences that would help writers to instantiate knowledge about readers' expectations, whereas this rarely happened in Paul's conferences.

A notable feature of all talk (teacher's and students' alike) for both children's conferences (see Tables 3 and 4) was variability in amount of talk on topics and on revision knowledge.

Finally, it is important to note that as we read through transcripts of the conferences, Allison's conferences portrayed her seriousness about her work. She put a great deal of effort into improvement of her writing and seemed to use conferences as a vehicle to come to new understandings. One clear piece of evidence of this was that during conferences, unlike many other children, Allison sometimes pushed the teacher to further explain a point, such as how to fix a problem.

The sense of excitement about writing which we will later show you in Paul's writing (and occasionally in his interviews) never came through during conferences when Paul's work was discussed. Though he sometimes contributed to conferences by critiqueing other's work, not a single example was located

in Paul's conference talk that conveyed the sparkle and interest so evident in his writing and occasionally present in his interview talk about his writing.

Quality and general impressions of the children's writing. Three broad statements can be made about the quality of the children's writing as judged by the analytic scale, over time. (a) There was considerable within-subject variability, marked not by a consistent trend over time, but by ups and downs. Allison's quality scores (for last draft) ranged from 15 to 35 through the 7 conferences; Paul's ranged from 20 to 37. (b) Allison's quality scores tended to remain somewhat below Paul's through the conference periods, just as they had been during the baseline periods. Allison's quality score (for last drafts) average during conferencing was 23.43; Paul's was 29.17. Only one of Allison's conference pieces was rated above 30; 3 of Paul's were. (c) Surprisingly, overall quality (for both Allison and Paul) did not, on the whole, improve through the conferencing period, as compared to the baseline period. (Recall that Allison's baseline quality average was 23.77, and Paul's was 32.00.)

Further, there was no evident relationship between amount of conference suggestions given to either Allison or Paul and their first- *or* last-draft quality scores. For example, Allison received the most suggestions (4) during conferences for pieces which were given Allison's highest *and* lowest last-draft quality scores of 35 and 15. One or 2 suggestions were given in each of her remaining conferences, where the final-draft compositions received scores of 17 to 29. Similarly, in three of Paul's conferences, one suggestion each was made, and quality scores for the final-draft compositions discussed in those conferences were 37, 33, and 37. In two other conferences, two and three suggestions were given, and the associated compositions received scores

of 32 and 27. A similar mixed pattern was evident for first-draft quality scores as well.

As we read through the written drafts and the transcripts of the interviews and the conferences, we gleaned some salient impressions of the children's writing that provided useful background to other following information. The dominant impression we had about Allison's writing was that the themes of her compositions were "light," and except for one "folktale" attempt, Allison's writing generally tended to chronicle events in her own everyday life, centering on family events and playtime occasions with her friends.

The most salient impression we garnered from reading Paul's writing was his sense of excitement about it. The excitement occasionally came across in interview transcripts too. The sense of excitement came from the following: (a) Nearly all of Paul's stories were action-packed adventures. (b) Paul frequently used words and phrases which adults might consider cliche, but which, to him, were dynamic and vigorous (e.g., "freaked out" [conference point six], "awesome" [baseline point 2]). (c) Paul was enthusiastic about writing for multiple personal purposes. For example, at conference time point 4, he wrote ideas for a play he would later draft, and turned the writing into an ad for the play, ending it with: "Can he stop them? Find out in the play."

Did Conferences Influence Students' Revision Knowledge and/or Activity?

Percentages indicating links between group conferences, interviews, and actual revisions carried out. First, we present the most general indications of conference influence, i.e., the percentages indicating links between between group conferences, interviews, and actual revisions. Table 5 shows significant differences between Allison and Paul in conference influence on

their talk about potential revisions and on their actual revision activity. On the whole, the percentages show that Allison's talk about probable changes (from interviews) and her revision activity were tightly linked to discussions and comments made during conferences. For example, column one shows that generally, during interviews, she mentioned about half of the suggestions made during conferences; similarly, column two shows that, overall, Allison carried out at least half, and sometimes all, of the conference suggestions.

Insert Table 5 about here.

On the other hand, the percentages show that links between conference suggestions, interview talk, and actual revisions carried out were much more variable for Paul, and he often ignored conference suggestions.

Notice also, a tendency towards more suggestions for changes during conferences for Allison than for Paul. (See denominators in the first two columns of parentheses.)

Counts of revisions identified in interviews and of revisions carried out. Counts of potential revisions Allison and Paul identified in their interviews and of the revisions they actually carried out were marked by variability from one conference time to the next. That is, there was no gradual increase or decline over the conference time periods; rather, counts remained steady (e.g., for Paul, for number of stage-1, stage-2, and stage-4 revisions), or counts fluctuated up and down. However, when counts through the conference period were compared to counts through the baseline period, they did show more influence of conferences for Allison than for Paul. Here are the main data documenting this point. (For simplicity of presentation, all of the numbers given in this section are rounded to whole numbers; and to control for length of composition, all counts were computed per 100 words.)

For number of potential revisions identified during interviews:

Allison mentioned between 1 and 4 during the baseline periods; during interviews through the conferencing periods, she sometimes mentioned more--between 2 and 8.

Paul mentioned between 2 and 4 during baseline; during interviews after conferences, he never identified more places for potential revisions, talking about from 0 to 4.

For number of stage-2 revisions:

Allison made 0 to 1 during baseline and 0 to 14 during conference periods. (Her stage-2 revisions after 4 of the conferences were relatively high--from 6 to 14.)

Paul made 2 to 6 both before and after conference periods.

For number of stage-3 revisions:

Allison made 6 during baseline and 6 to 23 during conference periods. (Five of the stage-3 revisions after conferences were relatively high; 4 times she made between 12 and 18, and once 23.)

Paul made 20 to 29 during baseline and 6 to 24 during conference periods. (Paul's amount of stage-3 revision during the conference period equalled that of his baseline period on only one conference occasion; during the remainder of the conference sessions, he made from 6 to 16 stage-3 revisions.)

Allison's development. Our reading of Allison's materials and transcripts revealed a clear development of knowledge about revision and of actual revision activity that seemed to be marked by three somewhat overlapping periods. The following section portrays the three periods.

At period 1, Allison seemed to understand some things needed to be changed in her texts, but in her conferences and interviews, she often suggested means which adult writers would consider unacceptable, or she believed the task of making the change would be too overwhelming to seriously consider. Notice especially how the following excerpts from her conferences and interviews show how Allison's awareness of the need for revision began to emerge, but also that she was often unsure of how to go about making changes.

For example, her first conference included a discussion about the order of events--when (in her story) the snow fell and when it melted--and how Allison might try to carry out needed revisions:

Teacher: O.K. What was it about:

Kristina: Going to her grandma's.

Teacher: Going to her grandma's. Katie, what else?

Katie: Fifteen inches of snow.

Teacher: There was fifteen inches of snow. Yes, Josh heard that too. Nicole?

Nicole: It melted.

Teacher: It melted the next day . . . What did you like about it?

. . .

Allison: It was dirty.

Teacher: . . . You got really dirty because it was dirty snow.

Allison: I also . . .

Teacher: O.K. So you slipped and fell down and got dirty. That isn't in there, is it? What questions do you have, or suggestions? Amburish?

Amburish: (unintelligible)

Teacher: Well, fifteen inches is a lot of snow.

Allison: (unintelligible)

Teacher: Oh. I see. O.K. So when you got there, there wasn't fifteen inches of snow. Oh, O.K. So I'm not sure that was clear. Was that clear to everybody else?

Allison: They had fifteen inches and . . . (unintelligible)

Teacher: Oh. O.K. I think you might have to add something about that. You might have to make that clearer to us so that we know it wasn't fifteen inches when you got there. Because it sounded like a lot of snow melted, because fifteen inches is about like this much. If it all melted the next day, that would be kind of amazing. Any other suggestions or comments?

(Moments later)

Teacher: I got confused because Allison said that the snow was there and then it melted and then she said the snow was there and then it melted. . . . So she's gone on this trip and then she got home, and then what did she tell us? "They had fifteen inches of snow." So you're back at your grandma's house. "But it melted today." That sounds like all fifteen inches melted, right? "And last night when we got there, there was a lot of snow, but the next day there wasn't much snow." So you're back at your grandma's, and at home, and at your grandma's, and at home . . .

Allison: I should have put . . . (unintelligible)

Teacher: O.K. How will you do that without having to rewrite it? Do you know how you can do that? Well, I'll show you.

If you have something up here that you want to put down here, you just put an arrow like this, and then when you're rewriting it, you just copy that down here. You don't have to rewrite it in this paper . . .

Notice in the following interview excerpt how Allison zeroed in on the central point made during her conference about the order of her text, and note also that she didn't fully understand the teacher's talk about how to make the sort of revision she needed. Instead, Allison seems unclear about precise means of accomplishing what she wants. This sort of conversation continued through several interviews and occasionally surfaced during conferences.

Interviewer: Are there any changes that you could think of making in your story?

Allison: Right here. See, when I said, "They had 15 inches of snow, but the next day it melted," . . . the person who was reading it . . . would think when I got there they had 15 inches and the next day it all melted . . . But when I got there, there was hardly even an inch.

Interviewer: So how do you want to change it?

Allison: Well, I could say, at the end of the story, I would add "but when I got there, there was not 15 inches of snow."

(Moments Later)

Interviewer: Are there any other changes in your story that you could make?

Allison: I don't think so. Well, it would take a lot to change because you would have to put different things, because it would have to be written all over again if I was going to do it.

Interviewer: You'd have to put what?

Allison: It would have to be written all over again if I did it.

Interviewer: If you changed the story the way you want to change it, you'd have to write it completely over?

Allison: Yeah, because, well, if I moved on the page that I didn't write, if I moved that to another page, then . . . (lengthy attempted explanation)

Interviewer: OK. So you'd like to reverse pages 2 and 3? . . . (lengthy explanation)

Allison: I want to change it. I don't know what page I need to change . . . I don't know what page I have to change. . . . What I might have to do is make this a two and mark the three out . . .

Even as late as conference point 5, Allison still occasionally struggled to understand various ways of implementing rearrangements. For example, at conference 5, a discussion occurred about how two bits of information, distanced from one another in the story, might be reordered to make the piece more coherent:

Teacher: . . . Now, there might be a possibility of maybe having those things together. . . How would you move this part all the way over there? How could you do that? Does anyone have any ideas of how she could do that?

Student: Make an arrow.

Teacher: Except it's on a different piece of paper, so she can't make an arrow.

Student: Make an arrow, and then make a number one.

Teacher: OK. So she could make an arrow with a number, and then put the number over here. Is that what you mean?

Student: She could cut it out.

Teacher: She could cut it. Which is what you did last time. So she could cut this, and just cut there, and tape it in.

Allison: How could I cut it?

Teacher: Well, you could cut this, and you could cut that, and then you could just put the tape on it. Do you know what I mean? . . .

Allison: Yeah, but this is in the middle of it.

Teacher: This isn't. It's at the end.

Allison: I know. But this is.

Teacher: You're not going to cut that. You are going to cut this. Right? And then we just put it where it's going to go. OK?

With regard to actual revision activity, during the first period of Allison's development, she generally did not attempt to carry out revisions she had already talked about during interviews. Over the baseline period, during interviews, Allison suggested five potential changes in her pieces, but she followed through on only one of them. Nearly all of the few revisions she did make during the baseline points were spelling changes.

At period 2, Allison began to think more clearly about multiple strategies for revision, ones in addition to tacking information on the end of compositions. For example, before conferencing, she never mentioned rearrangements; but she discussed them after four of her conferences. She also more confidently tackled the difficult task of carrying out revision through rearrangement, experimenting with different ways of accomplishing the

revisions. First, we will show an example of how her knowledge about revision seemed to be evolving. Notice that in period 2, her thinking about how to rearrange information was relatively clear. Table 1 shows the first draft of Allison's story at conference point 4. Conference discussion indicated that the other items in the piece were all "outdoor" events and that watching TV didn't seem to belong, and the duration of her stay did not fit well in the middle of the other entries about things Allison did at the beach. During the beginning of the interview, Allison indicated that she wanted to take out "and watched TV" because ". . . it didn't really go with anything else in the story, and everything else went together." The following discussion ensued:

Interviewer: Is there anything else in your story that you can think of changing?

Allison: (After considerable explanation) . . . just take all that ("and we stayed there for two days") and put it on the last page, and this part down here, add on to the page that we took off of.

Interviewer: So alright, let me see if I understand what you're saying. So, after "We had fun" on page 2, you want to take the rest of it and put that on page 3.

Allison: Yeah, this is how it would say, "We went to the beach. We went swimming and we collected shells and" whew, I'm trying to leave off "and watched TV."

Interviewer: I understand. Go ahead.

Allison: "We went to the beach. We went swimming and we collected shells. I might have a sunburn and we found a crab and we saw our friend at the beach. We had fun. And we got in a jacuzzi. We stayed there for two days."

Allison's thinking here about collecting like information through rearrangement seems clearer than her earlier thinking, but note that her strategy has not entirely met her goal, since "We had fun" still seems to intrude on the coherence of the piece.

Now let's look at an example of Allison's actual revision during the second period of her development when she experimented with various possibilities to a far greater extent than earlier. Table 1 shows that she did revise her "Beach" piece to create a better order for events in the final version. Allison dropped "woch TV" and moved "we sta there for to Day" to the end. Perhaps significantly, after her earlier conference discussion about ways to make potential changes in her piece, Allison chose (for the first time) to accomplish rearrangement of text by using scissors and tape to cut and move words.

At period 3, Allison's knowledge of revision seemed to continue to grow in that she began to identify problems of order and coherence *for herself*, and she seemed not only clear about how to make desired changes, but taken together, her suggested ways of making changes seemed more in line with her purported goal of fixing the order of information. Further, perhaps the most important change in Allison's actual revision activity occurred. She began to do significant revision between drafts, *in her mind*.

First, we'll give an example of the influence of conferences on Allison's growing knowledge about revision--her self-awareness of the need for well-ordered compositions. Immediately after reading aloud her first draft of the "Friend" story during conference point 6 (shown in Table 1), she said: "I want to change the order of mine. Because when I say 'first I went to my friend's house, but first she came to my house,' and that's when Jennifer came over (that's not right)." Further, towards the end of the conference, the teacher

talked to the children about the possibility of holding revisions in one's mind and reworking a piece directly from ideas held in the mind:

Teacher: . . . Now, you know what I'm just thinking Allison, is that you are saying that you want to change the order. Do you know what you can do on Friday? All of you can do this if you ever want. You could read over your story, and think about what it is that you wanted to say, and turn your paper over, and just write it again. Just write it over again. You know what I mean? That you could look at this, and instead of thinking that "I've got to put this here and move this here," that you might want to say that these are the things that I really want to say, and just start writing it again, and write it differently. Do you understand what I mean? And you can just change the order completely.

Excerpts from the transcript of her interview about the "Friend" story show more clarity in her thinking about how to rearrange the piece than was evident earlier:

Interviewer: Are there any changes you'd make in your story?

Allison: Well, it says, "I went to my house, but first she came to my house," . . . but first she came to my house here and I went to my friend's house down here.

Interviewer: Alright, right now your story says, "I went to my friend's house, but first she came to my house."

Allison: But I want it to say, "But first she," wait, "First she came to my house, then I went to her house." She came to

my house. "My friend came to my house, then we went to her house."

(and later) I want to put "We played keep-away" somewhere on this page because we played keep-away with Jennifer, and it's out of order.

Interviewer: Alright, so, here's the end of this sentence with Jennifer. OK, you've got "And a girl named Jennifer came to her house." And so, after that you want to put, "We played keep-away."

Allison: "We played keep-away with Jennifer."

Interviewer: What are you going to do with the rest of this then? It says, "We played keep-away and we threw the ball through our legs."

Allison: I want to put "keep-away and threw the ball through our legs" on this page.

Interviewer: . . . so now, this is what we've got: "My friend came to my house. Then we went to her house. And a girl named Jennifer came to her house. We played keep-away and we threw the ball through our legs. Then a baby came to her house."

Now turning to Allison's actual revision activity during period 3, her revisions of the same "Friend" story provide an example of significant advancement. During this period, Allison began to do more revision between drafts, in her mind. Table 1 shows Allison's revision stages 2 and 3 for her story written at conference point 6. The changes from stage 2 to stage 3 reflect "in-head" thinking about revision. Allison did understand the

teacher's earlier point during conferencing; she managed the difficult "in-head" revisions on her story when she got her paper back.

Paul's development. Close reading of Paul's materials yielded the impression that conferences had little influence on Paul's development of knowledge and actual revision activity. Only one central issue emerged--revising for cohesion. However, because Paul was aware of cohesion problems in his text before conferencing started, it is not clear that conferences actually spurred such revisions. At most, conferences may have had a weak influence on Paul's revision knowledge and activity with regard to cohesion.

First, here's an example of Paul's knowledge about revision and revision activity before conferencing started. Part of Paul's third baseline story (mentioned in a preceding section) was, "I have ultra magnus he becomes leader in transformers the movie, They are neat." During the subsequent interview, Paul said, "I'd turn 'they' into 'Transformers.'" Later, he explained that "'they are neat' doesn't make any sense." Even before conferencing, then, Paul was aware of the ambiguous referent for "they," and he did make the change in a following draft of the text.

Next, cohesion was a minor theme of four of Paul's five conferences. But after conferences started, Paul seemed reluctant to overtly accept comments or suggestions for revision made by others. Here are two examples that are typical of several conference discussions. First, after reading aloud his "Trip to the Museum" story at conference point 1 (shown in Table 1), the following discussion took place. Attend especially to the talk about the exophoric (non-cohesive) reference to "John."

Teacher: What was Paul's story about?

Evian: Somthing--a rock.

Teacher: No--lock. a lock.

Evian: Like I got?

Teacher: Yes. Is that like the one that Evian got? Ah, like the lock that you got at the museum. O.K. So it's about a lock.

Lindsey: I have a question.

Teacher: Can you wait just a sec? We're talking about what it's about first.

Ashley: The museum.

Teacher: Going to the museum. Was it all about going to the museum?

Ashley: No.

Teacher: It was about

A Child: getting the lock.

Teacher: Getting the lock at the museum, the gold lock.

Jason: Other people were there when he got it.

Teacher: Well, that's not what it's about though, is it? My question was, "What is his story about?"

Jason: Oh.

Teacher: Basically, it's about his gold lock, isn't it. What did you like about Paul's story?

Ryan: The gold.

Teacher: You liked him describing the gold part of the lock? O.K. So you liked his descriptions.

Evian: I liked that he got that.

Teacher: You like that he got one just like you did. Uh-huh.

A Child: Why did you buy it?

Paul: (Can't understand the tape.)

Teacher: That's what made you interested in it in the first place, I guess. Any other things that you liked about it? One of the things I liked about it is that it had a very good order to it. He told about he was at the museum, and he got the lock. He described the lock. He talked about why he liked it, and he ended by telling what he used it for. So it's got a very nice flow to it.

A Child: He used it for his money.

Teacher: Yes. Now, are there any questions you'd like to ask or any comments you'd like to make about the writing? You had a question you said?

jason: Forgot. It was about . . . something . . uh . . .

Teacher: Anything that you think Paul could add or take away or change in his story?

Lindsey: Um, the question I remember is, "Who was John?"

Paul: My brother.

Teacher: Does it say that in your story?

Paul: No.

Teacher: Alright. So if you were going to add who John was, who would you do that?

Paul: I would put an arrow on the line after that, and then when I was going to write it over again, I would write "John is my brother."

Teacher: O.K. So you could say, "John wanted one too. John is my brother." Are there any other ways you could change that? Katie?

Katie: "My brother wanted on too. His name was John."

Teacher: Alright. "My brother wanted one too. His name was John." Any shorter ways you can do that? You could say, "My brother John wanted one too." Or "John, my brother, wanted one too." That makes it easier than making two sentences, doesn't it? So it is suggested that they'd like to know who John is. Now, any other points that you had questions when you were listening to it?

A few minutes more of discussion continued as the teacher and others inquired about which museum Paul visited and when, how Paul got the money to buy the lock and why John couldn't buy one, and how Paul felt about buying the last lock, so his brother couldn't buy one. These comments were specific and focused.

However, notably, during his interview about this story, Paul did not mention the problem with the exophoric reference or any other of the conference discussion. The following discussion was typical of Paul's post-conference interviews:

Interviewer: O.K. Paul, if you look at your story, are there any changes that you could think of making in that?

Paul: No.

Interviewer: There aren't any changes at all that you could think of making in your story?

Paul: Yes.

Interviewer: Yes, there are, or yes, there aren't?

Paul: There aren't.

Interviewer: O.K. Thanks, Paul.

Paul *did* (as Table 1 shows) later change the exophoric reference, but made no other changes related to conference discussion. The several comments directed towards potential enrichment of the content of his piece, by further elaboration of details, were not implemented.

Second, there is some possibility that conference comments may have influenced cohesion in Paul's later *first* drafts. For example, at conference time point three, after a discussion indicating readers' difficulty sorting out characters in relation to pronoun referents, someone asked Paul, "Is there any way of telling who the good guys are and the bad guys are?" The following discussion took place:

Paul: Blitzwing and Megatron are the bad guys and Hot Rod and Cop are the good guys.

Teacher: Is there any way you can tell us that in here so that we would be able to follow it more easily?

Paul: Yeah.

Teacher: Where would you put that if you were going to add anything?

Paul: Umm . . . (no response)

Teacher: You could put "I watched Transformers the Movie again. My favorite part was" You would have to tell us near the beginning, wouldn't you? Because otherwise if it were at the end we would have to read it over again.

Paul didn't adjust this piece to address the problem with cohesion, but later, at conference point six, he started his first draft with "The good guys are . . . and the bad guys are . . ." (See Table 1.)

Conclusions and Discussion

Dramatic differences were noted between the two children in conference influence. The writer (Allison) who entered the study with some knowledge of revision, but little revision activity profited significantly from conferences. A clear pattern of development emerged over time. Allison's revision knowledge developed from an awareness of needed surface revision, but little accompanying understanding of appropriate strategies for carrying out the revisions, to an ability to identify problems of order and coherence by herself, linked with a clearer understanding of how to carry out desired changes. Similarly, her actual revision activity developed initially from minimal revision behavior (except for spelling changes) to eventual significant macro-level changes, including revision in her mind, between drafts.

On the other hand, the writer (Paul) who entered the study with perhaps slightly more knowledge about revision and with a high level of revision activity was not as clearly influenced by conferences, at least not to the extent that Allison was. Though instances were located where conference discussion appeared to influence his revision, particularly with regard to issues of cohesion, three factors detract from the possibility that conferences influenced him: (a) Paul was effecting similar revisions during the baseline and the conference period, especially with regard to cohesion, spelling, and punctuation; (b) he did not choose to follow through on many suggestions offered during conferencing (as compared to Allison); and (c) on several occasions, he revised less after conferences than he did at the baseline time period (even at times when the quality of a piece was rated lower than at baseline)..

The conclusions and the following discussion should be considered in light of several limitations of the present study: (a) The design of the

present study limits generalizations. Only two children and one teacher participated in the study, and only one kind of conference was used. Generalizability of results is bound to similar circumstances. (b) The study did not in any way address the social or political structure of the classroom. Examination of such issues (particularly gender and power issues) might have shed additional light on students' reasons for or against revising. (c) Detailed exploration of the ways in which teacher talk might have influenced student talk during conferences and vica versa was not done in the present study. Clarification of the extent of such influence might have led to fuller understanding of the relationship of the results to the content of the conferences. (d) No information was provided as to why students revised, why they wrote the compositions they chose to write, or why they chose particular audiences. Such information may have provided more insight into how revision is linked to writers' global intentions for their works and to writers' interrelationships with their readers. (e) Finally, the two subjects in this study were selected specifically on the basis of their initial revision knowledge and activity. They were not alike in potentially confounding ways, especially with regard to gender, temperament, and writing and reading ability. To help with interpretation of results we have tried, to the greatest extent possible, to describe how the students were different, and these differences should be considered as conclusions are drawn and results are discussed.

One noteworthy point to be made about the present study is that, unlike prior work, it chronicles not only the positive influence of at least one type of conference on a writer's development, but also the lesser effect on another writer. Whereas reports of positive influence are necessary and helpful, it

would seem to be equally important to know something about the conditions under which they are ineffective.

Why might conference influence be mediated by entry-level knowledge about revision and/or revision activity? We have speculated elsewhere (reference deleted for anonymity) that differences in quality of writing could affect differences in conference discussion, which in turn, have variable influence on revision knowledge and revision activity. However, in the present study, there was no obvious relationship between amount of conference suggestions given and the students' first- or final-draft quality scores.

Another, more plausible, reason in the present study could be that students with some minimal knowledge about revision have the most to gain from conferencing. And perhaps conferences can contribute little extra help to students who are already engaged in a fair amount of revision. In the same vein, at least one recent report indicated variability in effectiveness of a computer revision-prompting program according to writer's ability level (Daiute, 1985). Better writers and revisers found computer revision-prompting programs intrusive and detrimental to their own composing processes.

Certain features of conferences that were similar for both Allison and Paul were interesting. First, the high percentage of teacher talk which instantiated declarative or procedural knowledge about compositions suggests that a central purpose of the conferences was to help writers to know about "universal" features of writing or what makes a "good" composition. Similarly, in a study of individual writing conferences between college students and tutors, Walker and Elias (1987) found that a characteristic of successful conferences was an agenda for articulation of "principles of good writing."

Second, the high percent of teacher talk compared to student talk was similar to the percent found by Walker and Elias (1987) for individual writing conferences between college students and tutors. Importantly, though the conferences in this study and the Walker and Elias study seemed to be dominated by the teacher, Walker and Elias at least found no relationship between how much students talked and their judgments of success of the conferences.

A special note should be made of the eventual development of Allison's ability to revise in her mind, between drafts. Generally, such "in-head" revision is especially important because it can be associated with more thoughtful and more significant, "macro-level" change of text. It suggests an author views writing as the unfolding of meaning over drafts. It is also probable that writers learn more when thoughtful and meaningful revision occurs, so writers are apt to learn more when they are willing and able to undertake large scale revision in their minds between drafts.

Similarly, Allison's evolving ability to make meaningful revisions and rearrangements of text is noteworthy. Most prior reports indicate that when writers of all ability levels and ages do revise, surface revisions and additions are, by far, the most typical types (Bridwell, 1980; Crowley, 1977; Faigley & Witte, 1981; Fitzgerald & Markham, 1987; Freedman & Pringle, 1980; Graves, 1979; Kane, 1983; MacArthur & Graham, 1987; Monohan, 1982; National Assessment of Educational Progress, 1977; NAEP & ETS, 1986; Ramig, 1982; Scardamalia & Bereiter, 1986; Sommers, 1980; Vukelich, 1986; Vukelich & Leverson, 1987). Although the rearrangements Allison effected may seem simple to adult writers, focussing on coherence in text through careful sequencing, carried out by deletion, and notably, rearrangement of text, may be complex activities for a first grader.

The lack of increase in overall quality of writing for both children across the duration of the study is difficult to explain. Variation from composition to composition would be expected, but at least some small increase would be anticipated, on the whole, from compositions at the baseline periods, to those during the last weeks of conferencing. Four distinct inferences can be made from the lack of overall increase in quality: (a) The conferences and the classroom writing program did not enhance the children's quality of writing; (b) Allison's growth in learning about revision did not influence the quality of her writing, on the whole; (c) the scale used to measure quality of writing was not sensitive to small improvements; and (d) it is possible that the effects of conferences and/or the classroom writing program on overall quality show up much later in time. Data are not available from the present study to support one or the other of these inferences.

The results of our study suggest an important implication for teachers of young children. Group writing conferences, at least as conducted in this study, can benefit many, perhaps even most, children. But some children may not require readers' help with their writing or may not respond well to working in groups, perhaps preferring individual conferences or none at all. Teachers who understand this will seek a variety of settings for supporting writers, providing feedback, and sustaining their development.

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Table 1
Selected Stories Written by Allison and Paul

Allison, Baseline 2, Stage 1

I went to my fis (friend's) house and we went to toey R us and we got a gam and the Nam uv thegam wasaunaLee (Monopoly) I sta at hr houau ool day and we play the gam and Lisa was the bakr and hr buth (brother) haed a fied ovR to and his fred ea pizz with us and I got to eat a pes uv pizz to hr dnthr was Bing fue (her brother was being funny) and we did (didn't) fis (finish) we went to git the pizz with hr momtr and Leighann eat a pes uv pizz to

Allison, Baseline 2, Stage 2

I went to my fis house and we went to toey R us and we got a gam and the Nam uv the gam was munaLee I sta at hr house ool day and we play the gam and Lisa was the bakr and hr duth haed a fied ovR to and his fred ea pizz with us and I got to eat a pes uv pizz to hr dnthr was Bing fue (her brother was being funny) and we did fis we went to git the pizz with hr momtr and Leighann eat a pes uv pizz to

Allison, Baseline 2, Stage 3

I went too *gi* my fis house and we went to toey R us and we got a gam and the Nam uv the gam was munaLee I sta at hr house ool day and we *pady* the gam and Lisa was the bakr and hr duth *have* a *fed* ovR to and his fred ea pizz with us and I got to eat a pes uv pizz to hr dnthr was Bing fue (*deletion of "and"*) we did fis we went to git the pizzwith hr momtr and Leighann eat a pes uv pizz to

Allison, Baseline 2, Stage 4

I went tomy fis house and we went to toey R us and we got a gam and the Nam uv the gam was munalLee I sta at hr house ool dny and we play the gam and Lisa was the bakr and hr duth have a fed ovr to and his fned ea pizz with us and I got to eat a pes uv pizz to hr (her) dn (brother) was bing fue (funny) we did fis we went to git the pizz with he momtr and Leighann eat a pes uv pizz to

Allison, Conference 4, Stage 1

We went to the Beech we went wsming and we Catl (collected) Shal (shells) and woch Tv and I mit have a sunBrnn and w fnded (found) a Drab and we Saw arr fined (friend) at theBeech we have fun and we sta there for to Ddays and we got in a JuuKaee (jacuzzi)

Allison, Conference 4, Stage 4

we went tothe Beech w went wsaning and we Clati Shal I mit have a sun Brn and we fnled a Drab and we Saw arr fined at the Beech we have fun and we got in a JuuKaee and we sta there for to Day

Allison, Conference 6, Stage 1

I went to my frineds house But first She Cam to my house frst a grl Named Jinfr cam to hre house then a baby Cam to hre houSe we played Kepawa (Keep-away) and we thro the ball thr (through) a (our) lass (legs) She haved a boknrma (broken arm) thoo (though) and they were Vare his and it wns vure fuN to

Allison, Conference 6, Stage 2

my frst cam to to my house I went to my frineds house frst a grl Named Jinfr (rest of the story same as stage 1)

Allison, Conference 6, Stage 3

my frined Cam to my house then we went to hre house hre Name was Jinfr She haved a bokn rma and we played Kepawa and thro the pols (balls) thro awr lass and then a baby CaN (came) to hre house they they were vrey his and it wns wr vre (was very) fun to

Paul, Baseline 2, Stage 1

I got D. compose (decompose) for christmas from santa. he is a skeleton he has ribs they can open up. he is a foot and a half tall. I think he is one of the biggest toys in the world! he has big eyeballs. he is scarry and osum (awesome) too. he is an Inhumanoid.

Paul, Baseline 2, Stage 2

for cristmas I got D. compose for christmas from santa. he is a skeleton he has ribs they can open up. he is a foot and a half tall. I think he is (deletion of "one of") the biggest toys in the world! he has big eyeballs. he is scarry and sort of osum too. he is an Inhumanoid.

Paul, Baseline 2, Stage 3

for Cristmas I got D. compose from santa. *He* is a skeleton. (*addition of period*) *He* has ribs. (*addition of period*) They can open up. *He* is a foot and a half tall (*deletion of period*) I think he is the biggest toy (*deletion of "s"*) in the world. (*change in punctuation*) he has big eyeballs (*deletion of period*) he is scarry and sort of *neat* too. he is an Inhumanoid.

Paul, Baseline 2, Stage 4

for Christmas I got D. compose from santa. he is a skeleton. Hehas ribs. They can open up. he is a foot and a half tall I think he is the biggest toy in the world. he had big eyeballs he is scarry and sort of osum too. he is an Inhumanoid.

Paul, Conference 1, Stage 1

I went to the museum. I bought A gold lock. it has a thin layer of real gold on it. I has cut (cute) keys. I like to play with it. the lock is wourth lots. John wanted one too. But the didnt have any more. i use the lock to lock up my money jar.

Paul, Conference 1, Stage 4

I went to the museum. I bought a gold lock. it has a thin layer of real gold on it. It has cute keys. I like to Play with it. the lock is wourth lots. my brother John wanted one too but they didn't have any more I use the lock to lock up my money jar.

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Puul, Conference 3, Stage 1

I watched transformers the movie again my favroite part was when hot rod saw dicepticons in the shuttle and when megatron shot his cannon and knocked hot rod on to a little clif then blitz wing said come on down outobreath (autobreath) then he transformed into a tank and kup (cup) came and made blitz wind aim higher and shooy a insecticon

Paul, Conference 3, Stage 4

I watched transformers the movie again my favroite part wa when hotrod saw d icepticons in the shuttle and when megatron shot his canon and knocked hotrod onto a little clif then blitz wing said come on down outo breth then he transformed into a tank and then Kup came and made him aim higher and shoot an insecticon

Paul, Conference 6, Stage 1

The good guys are people the bad guys are monsters. The good guys wer being attaked by the bad guys. The good guys shot the clouds. the bad guys hated the rain But it rained and the fought in the rain because the bad guys might still win. But then they freeked out. And the good guys won and had a big celebration.

Paul, Conference 6, Stage 4

The good guys are people the bad guys are metal monsters the good guys were being attaked by the bad guys the good guys shot the clouds the bad guys hated the rain becuuse they might rust but it rained and they fought in the rain becuuse the bad guys might still win. but they freeked out. and the good guys won and they had a big celebration.

Note. Italics in selected entries show changes as compared to the immediately preceding version.

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Table 2

Definitions and Selected Examples of Conference Coding Categories

Category (Code)	Definition	Selected Examples
WHO TALKS		
Teacher (T)		
Student (S)		
FUNCTION	Purpose of the statement.	
INFORM (I)	Tells others something.	I liked that her friends got locked out.
ELICIT (E)	Tries to get a response from others.	When did you go?
REREAD (RD)	Rereads part of student's writing.	
ELABORATE (EN)	Repeats, extends, paraphrases, or summarizes (an)other statement(s).	(1) Here are the details that tell what's awesome about the watch. (2) You press it down. (3) It changes colors. (4) It gives the date. (Statements 2, 3, and 4 each elaborate 1.)
TOPIC	Subject of the statement.	
FORM (F)	Structural aspects of the text, the "means by which the content is communicated" (Chatham, 1975, p. 295).	She told it in exactly the order it happened.
CONTENT (C)	The "stuff" of the text, including comments about word choice.	Which cereal box did you get it in?
FORM-CONTENT (F-C)	A statement may be about both form and content.	I liked how you put in so much detail about pulling out the tooth.
PROCEDURE (P)	Refers to carrying out the process.	If you were going to add that, where would you put it?
OTHER (O)	Topic cannot be coded as F, C, F-C, or P.	It was hard to hear.
AID DECLARATIVE OR PROCEDURAL KNOWLEDGE (X)	The statement may either directly or indirectly help writers to instantiate declarative knowledge about readers expectations regarding content or formal characteristics of writing or procedural knowledge about the writing process.	If you were going to add it, where would you add it? I want everyone to pay attention to the order. Your story doesn't say that.
REVISION KNOWLEDGE		
IDENTIFY PROBLEM (ID)	The statement identifies a problem.	Did he tell us any of that in his story?
KNOW HOW TO FIX (K)	The statement either informs about or elicits information about how to correct a problem spot.	If you were going to add that, where would you put it?
LEVEL OF REVISION [a]	A statement about a revision which:	Changing (1) You pay two dollars to (2) You pay two dollars entrance fee.
SURFACE (S)	would not bring new information into the text or remove old information in a way that could not be recovered through inferencing;	
MEANING (M)	would bring new information to the text or remove old information in a way that it could not be recovered through inferencing.	Changing (1) You pay money to (2) You pay two dollars.
KIND OF REVISION [a]	Statement indicates:	
ADDITION (A)	new text would be added;	Changing (1) You pay money to (2) You pay a lot of money.
DELETION (D)	text would be removed;	Changing (1) Several rustic looking restaurants to (2) Several rustic restaurants.
SUBSTITUTION (SUB)	text would be traded;	Changing (1) out-of-the-way spots to (2) out-of-the-way places.
REARRANGEMENT (R)	text would be moved around.	Changing (1) springtime means to most people to (2) To most people springtime means.

[a]Definitions and some examples are from Faigley & Witte, 1981.

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Table 3
Allison's and Paul's Percent of Teacher Statements in Group Conferences Categorized According to Function, Topic, and Selected Other Features

	Conference	% of All Statements	Function				Topic[a]					X	Revision Knowledge		Level		Kind[b]	
			I	E	RD	EN	F	C	F-C	P	O		ID	K	S	M	A	R
Paul	1	75.49	10.39	15.58	0	74.03	9.09	46.75	2.60	15.58	6.49	35.06	1.30	15.58	0	15.58	15.58	0
	2	Didn't Read																
	3	77.28	14.29	16.33	8.16	61.22	22.45	32.65	0	24.49	2.04	48.98	14.29	24.49	0	0	0	0
	4	Didn't Read																
	5	56.45	22.86	28.57	0	48.57	11.43	40.00	17.14	8.57	5.71	51.43	8.57	8.57	0	14.29	14.29	0
	6	74.77	15.66	14.46	21.69	48.19	12.05	44.58	0	9.64	3.61	38.55	25.30	6.02	0	6.02	0	6.02
	7	68.29	21.13	28.51	3.57	46.43	3.57	67.86	0	0	7.14	21.43	0	0	0	0	0	0
Allison	1	86.52	18.18	11.69	12.99	57.14	1.30	37.66	7.79	10.39	16.88	31.17	23.38	7.79	0	7.79	14.29	0
	2	Didn't Read																
	3	70.33	14.06	14.06	0	71.88	21.88	25.00	31.25	0	6.25	45.31	9.38	18.25	0	0	0	0
	4	75.65	13.79	17.24	14.94	54.02	1.15	31.03	24.19	9.20	8.05	16.09	3.45	9.20	0	0	0	0
	5	69.00	11.59	20.24	7.25	60.87	0	10.14	15.94	43.48	14.49	46.38	2.90	39.13	27.54	2.90	2.90	27.54
	6	63.89	21.74	17.39	0	60.87	4.35	4.35	4.35	65.22	8.70	73.91	8.70	65.22	0	4.35	4.35	0
	7	68.06	18.37	20.41	26.53	34.69	10.21	30.61	8.16	6.12	0	36.73	12.24	6.12	0	6.12	6.12	0

NOTE. Paul did not read at conferences 2 and 4; Allison did not read at conference 2. Also, category abbreviations used in this table are explained in Table 1.

[a] Topic subcategories for teacher statements do not sum to 100% because the subcategory "Conference Questions" which included the three main conference questions asked by the teacher (and all her references to it) is not shown here.

[b] Only additions and rearrangements were discussed.

Table 4
Allison's and Paul's Percent of Student Statements in Group Conferences Categorized According to Function, Topic, and Selected Other Features

	Conference	% of All Statements	Function				Topic[a]					X	Revision Knowledge		Level		Kind[b]	
			I	E	RD	EN	F	C	F-C	P	O		ID	K	S	M	A	R
Paul	1	24.51	72.00	12.00	0	16.00	0	72.00	0	16.00	12.00	0	0	16.00	0	16.00	16.00	0
	2	Didn't Read																
	3	22.22	85.71	0	0	7.14	14.29	57.14	0	14.29	14.29	0	0	0	0	0	0	0
	4	Didn't Read																
	5	43.55	66.67	0	3.57	29.63	0	77.78	3.70	3.70	11.11	3.70	0	3.70	0	3.70	3.70	0
	6	25.22	71.43	10.71	0	17.86	3.57	75.00	0	14.29	7.14	14.29	3.57	14.29	0	14.29		14.29
	7	31.71	69.23	15.38	0	15.38	0	100.00	0	0	0	0	0	0	0	0	0	0
Allison	1	13.48	83.33	0	0	16.67	0	100.00	0	0	0	0	0	0	0	0	0	0
	2	Didn't Read																
	3	29.67	70.37	11.11	0	18.52	0	77.78	11.11	0	1.11	0	3.70	0	0	0	0	0
	4	24.35	64.29	14.29	3.57	17.86	0	85.71	7.14	3.57	0	0	0	3.57	0	0	0	0
	5	31.00	77.42	6.45	0	16.13	3.23	35.48	25.81	32.26	3.23	38.71	12.90	32.26	22.58	3.23	3.23	22.58
	6	36.11	69.23	7.69	0	23.08	30.77	38.46	15.38	7.69	7.69	23.08	38.46	7.69	7.69	7.69	0	0
	7	31.94	65.22	13.04	0	21.74	8.70	86.96	4.35	0	0	4.35	0	0	0	0	0	0

NOTE. Paul did not read at conferences 2 and 4; Allison did not read at conference 2.
Also, category abbreviations used in this table are explained in Table 1.

[a] Topic subcategories for teacher statements do not sum to 100% because the subcategory "Conference Questions" which included the three main conference questions asked by the teacher (and all her references to it) is not shown here.

[b] Only additions and rearrangements were discussed.